ABSTRACT

A semiconductor workpiece processing tool comprises a plurality of process modules for processing the workpiece, where a number of the process modules include a robot loading window. A control system is included for managing operation of the processing tool including a production route defining movement of the workpiece among a number of the process modules. The control system includes a user interface through which an operator can define the production route and recipes to be performed on the workpiece in each of the process modules, a system controller for controlling execution of the production route, a process module controller associated with each of the process modules for controlling the processing of the workpiece in the process module, and a network connecting the user interface, system controller and each process module controller. The control system is configured to select the next process module in the production route when a workpiece is substantially completed with an existing process in the production route.